

***Non-Statutory Double Patenting Rejection***

The Examiner has rejected claims 1-31 under the judicially created doctrine of obviousness-type double patenting over claims 1-25 of U.S. Patent 5,599,712.

Applicants respectfully point out that the pending claims 1-31 are not obvious over claims 1-25 of U.S. Patent 5,599,712 (the '712 patent) for reasons, previously stated, which the Examiner has yet to address. The instant application is directed to methods and pharmaceutical compositions that employ inducible and radioinducible transcriptional regulatory sequences as well as stable integration of the polynucleotide. Accordingly, the pending claims are not directed to the same invention as are the claims of the '712 patent, which means that no issue of double patenting exists.

Reconsideration and withdrawal of the rejection therefore are respectfully requested.

***Enablement Rejection under 35 U.S.C. § 112, first paragraph***

The Examiner rejected claims 1-33 under 35 U.S.C. § 112, first paragraph, alleging that the specification does not enable one skilled in the art to make and/or use the invention. Applicants respectfully traverse the rejection.

Examiner Chen premised the enablement rejection on a belief that "the specification fails to provide adequate guidance for a method to protect a mammal . . . from said toxic species by using any kind of vector other than adenovirus, any kind of promoter other than egr-1 to transiently express any polynucleotide that encodes a protein and achieve therapeutic effect *in vivo*." See Office Action at page 7, lines 14-17. It is applicant's position that this rationale was not supported by "acceptable evidence or reasoning" and, hence, does not pass muster under *In re Marzocchi*, 439 F.2d 220, 224 169 USPQ 367, 371 (CCPA 1971). Withdrawal of the rejection therefore is warranted. Nevertheless, application intends to submit data to show that an *in vivo* therapeutic effect is associated with a vector construct other than a liposomal and/or adenoviral vector. to permit applicant the time needed to carry out tests in this regard, the PTO's favorable action is requested with respect to the accompanying "Petition for Suspension of Action under 37 C.F.R. §1.103."

***Rejections based on 35 U.S.C. § 102(e)***

The Examiner has rejected claims 27-29 under 35 U.S.C. § 102(e) as allegedly anticipated by Heckl *et al.* Heckl *et al.* discloses the DNA sequence encoding human manganese superoxide dismutase (hMn-SOD) and expression of hMn-SOD in yeast and bacteria. Heckl *et al.* does not teach a pharmaceutical composition comprising a polynucleotide encoding a protein that is transiently expressed in a subject exposed to an agent that elicits production of a toxic species, such as a superoxide anion. Nor does Heckl *et al.* describe a pharmaceutically acceptable vehicle such as a liposome, adenovirus vector or a ligand-DNA conjugate. For these reasons Heckl *et al.* does not anticipate claims 27-29 of the instant invention. Applicant respectfully requests withdrawal of the rejection under section 102(e).

***Rejections based on 35 U.S.C. § 103(a)***

The Examiner has rejected claims 1-8, 12-15, 19-26, 30 and 31 under 35 U.S.C. § 103(a) as allegedly obvious over Brown *et al.* in view of Wegner *et al.* Applicants respectfully traverse this rejection.

This obviousness rejection of claims 1-8, 12-15, 19-26, 30 and 31 over Brown *et al.* in view of Wegner *et al.* is defective because it applies 1994 publications that are not available as references against the October 15, 1993 filing date of the parent application.

Furthermore, the claimed invention is not directed to one or more new elements, rather, a new method employing a new combination of elements. In fact, the references cited by the Examiner as disclosing particular elements of the invention do not disclose the elements of the claimed invention. This rejection is improper because the examiner has not shown that the prior art as a whole suggests the desirability to selectively combine the references he has chosen. The examiner presents no reasoning as to why the artisan, reviewing only the collective teachings of the references, would have found it obvious to pick and choose various elements from the cited art, thereby to arrive at the claimed invention. The examiner has done little more than cite references to show the existence in the art of one or more elements, as recited.

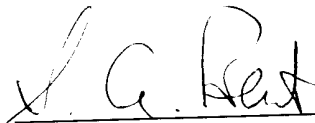
Thus, the combined teachings of the cited art do not address the specific object of the instant invention to provide transient expression of the identified polynucleotides *in vivo*. For these reasons, the claimed invention is not obvious, within the meaning of section 103, over the combination of Brown *et al.* in view of Wegner *et al.* More critical, however, is the fact that these references are not available as prior art.

### **CONCLUSION**

In view of the foregoing remarks and Declaration, it is respectfully urged that the present claims are in condition for allowance upon consideration of the forthcoming data to be provided by Dr. Greenberger. An early notice of the granting of our Petition for Suspension of Action is earnestly solicited. Should there be any questions regarding this application, Examiner Chen is invited to contact the undersigned at the number shown below.

Respectfully submitted,

September 17, 1999  
Date

  
Stephen A. Bent  
Reg. No. 29,768

FOLEY & LARDNER  
3000 K Street, N.W., Suite 500  
Washington, D.C. 20007  
Phone: (202) 672-5300  
Fax: (202) 672-5399